CLAIMS

1. A process for separating multibranched paraffins comprised in a hydrocarbon feed comprising hydrocarbons containing 5 to 8 carbon atoms per molecule, in particular linear, monobranched and multibranched paraffins, comprising bringing said feed into contact with at least one zeolitic adsorbent, characterized in that said adsorbent has at least two types of channels, principal channels with an opening defined by a ring of 10 oxygen atoms (10 MR) and secondary channels with an opening defined by a ring of at least 12 oxygen atoms (at least 12 MR), said secondary channels only being accessible to the feed to be separated via said principal channels.

2. A separation process according to claim 1, characterized in that said adsorbent contains silicon and at least one element T selected from the group formed by aluminium, iron, gallium and boron, the Si/T mole ratio being at least 10.

3. A separation process according to claim 1 or claim 2, characterized in that said zeolitic adsorbent is a zeolite with structure type EUO.

4. A separation process according to claim 1 or claim 2, characterized in that said zeolitic adsorbent is a zeolite with structure type NES.

5. A separation process according to claim 1 or claim 2, characterized in that said zeolitic adsorbent is a zeolite with structure type MWW.

6. A separation process according to claim 1 or claim 2, characterized in that said zeolitic adsorbent is a NU-85 zeolite.

7. A separation process according to claim 1 or claim 2, characterized in that said zeolitic adsorbent is a NU-86 zeolite.

8. A separation process according to any one of claims 1 to 7, characterized in that said zeolitic adsorbent is mixed with a zeolite with structure type LTA.

9. A separation process according to any one of claims 1 to 8, characterized in that said hydrocarbon feed originates from atmospheric distillation of crude petroleum.

10. A separation process according to any one of claims 1 to 8, characterized in that said hydrocarbon feed originates from a reforming unit.

11. A separation process according to any one of claims 1 to 8, characterized in that said hydrocarbon feed originates from a conversion unit.

12. A separation process according to any one of claims 1 to 11, characterized in that said it consists in fractionating said hydrocarbon feed into at least two distinct effluents, at least one of which is rich in multibranched paraffins and optionally in aromatic and naphthenic compounds.

13. A separation process according to any one of claims 1 to 11, characterized in that it consists in fractionating said hydrocarbon feed into three distinct effluents, an effluent that is rich in linear paraffins, an effluent that is rich in monobranched paraffins and an effluent that is rich in multibranched paraffins and optionally in aromatic and naphthenic compounds.

14. A process according to any one of claims 1 to 13, characterized in that at least one light fraction is separated by distillation upstream or downstream of the separation unit.

15. A process according to any one of claims 1 to 13, characterized in that the feed contains a C5 cut and at least one deisopentaniser and/or at least one depentaniser is/are located upstream or downstream of the separation unit.

16. A separation process according to claim 14 or claim 15, characterized in that said light fraction or isopentane and/or pentane and/or a mixture of the two substances acts as an eluent to implement separation.

17. A separation process according to any one of claims 1 to 16, characterized in that separation is carried out in the liquid phase at a temperature in the range 50°C to 250°C and at a pressure in the range 0.1 to 7 MPa.

18. A separation process according to any one of claims 1 to 16, characterized in that separation is carried out in the gas phase at a temperature in the range 150°C to 450°C and at a pressure in the range 0.01 to 7 MPa.